

CALVIN WOODS, P.E., R.P.L.S.

Texas A&M University

Senior Professor & Professor Emeritus, Sept. 2001 - date
Professor of Civil Engineering, July 16, 1972 - Sept. 2001
Test Pilot, Flight Mechanics Laboratory, College of Engineering, 1976 -1979

University of Texas at El Paso (formerly Texas Western College)

Professor and Head of Civil Engineering, January 1964 - May 1972
Associate Dean of Graduate School, Sept. 1970 - May 1972
Radiation Safety Officer for UTEP, Sept. 1964-May 1972

Lamar State College of Technology, September 1959 - May 1961

Assistant Professor/Associate Professor of Civil Engineering

Colorado School of Mines

Instructor of Civil Engineering, July 1957 - May 1959

REPRESENTATIVE INDUSTRIAL & OTHER EXPERIENCE

As a **consulting engineer** I prepared applications, closure plans, modifications of permits, or modifications of operating plans for 9 Type I landfills, 2 Type II landfills, and 1 Type III landfill.

Weston Solutions (formerly Roy F. Weston, Inc.), Houston, TX, Landfill Projects from 1999 - 2010. City of Waco Landfill Permit Modification, City of Port Arthur Landfill Closure, Landfill closure on Air Force Base in San Antonio TX and in Altus Oklahoma. Foundation investigation, served as member of Tiger Team for EPA concerning the operation of a Type I Municipal Landfill (Chintilly) in New Orleans. I was responsible for computing the maximum height of the landfill limited by consolidation and shear failure using existing laboratory data. The team lived on the same floor and worked long days and evenings every day for two weeks. Worked on TNRCC Industry Voluntary Cleanup for Lead Site and Sulfur Site, both in Houston, Tx. Designed a clay cap for the lead site and a HDPE liner and leachate collection system for the sulfur site, 3 months.

Engineer Adviser, **University of South Alabama** (USA), Project concerned with title to approximately 12,000 acres of land with producing oil and gas wells in Mobile Bay. Prepared reports and testified before combined House and Senate Legislative Committee, Alabama State Legislature. USA successfully gained ½ of the mineral rights from the Alabama Game and Fish Commission.

Engineer Adviser, **University of Zulia**, U. S. Department of State. University was applying for a graduate program at the University. Three weeks in country and one semester reviewing documents, 6 months.

Engineer Adviser, **University of Juba** (Sudan) and the UNDP/TAMU Research Foundation Project. Taught statistics in the university, completed the construction of three duplexes for Faculty/Staff housing using physical plant personnel, completed construction of potable water system and the sewer system, 7 months.

Bush Pilot/Engineer Adviser, **Presbyterian Church in Republic of Zaire**. Provided aviation services for support of three hospitals and nine dispensaries. Designed a low head hydroelectric plant (dam, spillway, canal, generator house, and selected low head generator). Three months. Two years later a construction missionary came to TAMU for training in concrete batch design, surveying, and general construction and he constructed the plant. It is still operating (2 months).

Engineer Adviser, **Rio Grande Compact Commission**, State of Texas. Member of 3-person advisory committee for the Compact Commissioner concerning the Rio Grande Compact between Colorado, New Mexico, and Texas, 4 years.

Engineer Adviser, **City of Juarez**, Mexico. Fate of Coliform Bacteria in Irrigation Return Flows (irrigation water was raw sewage).

Acting District Engineer, **Nome District**, Alaska Department of Highways. Constructed 8 miles of gravel road and constructed a truss type bridge (superstructure only, foundations completed the summer before) over the Kuzitren River, summer.

Consulting Engineer, **Gulf States Utilities**. Design of foundations for steel transmission towers (95' to 275' tall). Designed or checked design of steel, concrete and timber structures. Checked designs of access roads, and intake and discharge canal for steam power plant. Load tests on test piles. Projects in Louisiana and Texas (2 years).

Consulting Engineer, **KerMac Nuclear Fuels**. Design and layout of twelve miles of access road for a uranium mine in New Mexico. Design of fire protection system for a laboratory. Assisted in market survey and helium conservation project. Design of the "round" for a uranium mine, 2 years.

Project Engineer & Construction Superintendent, **Texas Portland Cement Company**, Orange, Texas. Design and construction of a 1500 bbl/day wet process Portland cement manufacturing plant, 18 months.

President and Principal Engineer, **Anderson, Bradley, Dyess & Woods**, El Paso, Tx. We operated a laboratory and two drilling rigs. My projects included quality of ground water for two refineries. Predicted future water quality and drawdown for a well field. Prepared a successful application for an injection well. Studied the effects on ground water quality caused by reusing blow down water for agricultural use. Represented two refineries before Texas Water Quality Control Board with reference to injection wells, industrial waste landfills, and hazardous waste treatment and disposal on sight. Soil investigations and recommendations for ten schools, five commercial and industrial building. Investigations of three foundation failures for commercial buildings, 5 years.

Engineer Adviser, **White Sands Missile Range**. Projects included recharge of ground water with treated sewage effluent to prevent salt water intrusion, general civil engineering, and investigation of "classified" hazardous waste in waste water treatment plant (3 years).

Member Technical Advisory Committee, **Texas Air Quality Board**, 2 years.
Member Technical Advisory Committee, MSW, **Texas Water Commission**, 2 years.

Visiting Professor of Civil Engineering, **University of Oklahoma**. Member of Faculty for NSF/AEC Summer Institute, Uptake of Radioisotopes in Biological Systems, 2 years.

AEC Research Fellow, **Savannah River Laboratory (SRL)**. Participated in study of uptake of radioisotopes in filamentous algae. Participated in design and installation of monitoring wells. Field work at SRL one summer, research project in lab, 2 years.

Sumpter Technical Education Center, Sumpter, South Carolina. Wrote manuals and taught the first certification courses for water and wastewater treatment plant operators in the state, 9 months preparing manuals, 3 months teaching the courses.

Gilmer Costruction Co., El Paso, TX. Design of shield and construction system for three tunnel projects in downtown El Paso. Provided underground surveying services, 2 years.

Buchanan Soil Mechanics, Inc., Bryan, Texas. Served as Principal Engineer for one year (half time) while the owner took a one year leave of absence to sail around South America. Supervised two EITs and a drilling crew.

Part time **flight instructor** for many years and faculty adviser for the TAMU parachute club for several years.

ENGINEERING & SURVEYING REGISTRATION

Texas Professional Engineer, Texas Registered Public Surveyor, New Mexico Professional Engineer, Alaska Professional Engineer and Land Surveyor, Louisiana Professional Engineer and Land Surveyor

EDUCATION

BSCE, University of Houston, May 1955

MSCE, University of Colorado, May 1961

PhD, University of Texas, January 1964

MILITARY SERVICE

u. s. Army Airborne Infantry and Airborne Ranger Infantry, 7 Jan. 1948 – 7 Jan. 1952. Service in U.S., Japan and Korea. Duties: Rifleman, Squad Leader, Platoon sergeant, Acting Platoon Leader, Field First Sergeant. Rank at Discharge: Sergeant First Class. Honorable Discharge.

UNIFORMED SERVICE

U. S. Public Health Service Inactive Reserve, 1964 – 2001. Rank: Engineering Director (Captain, O-6 Date of Rank: 1966), Active Duty during Desert Storm on Navaho Indian Reservation dealing with potable water system, waste water collection and disposal, solid waste collection and disposal (landfill).

ELECTIVE OFFICE

Robertson County, Texas County Surveyor, 1984 – 1992.